

ering the brief time to the events from the start of erlotinib (3, 3, 5, 21, and 58 days, respectively), it is highly probable.

Previous studies have shown that EGFR was highly expressed in the epithelium of the gastrointestinal tract, and severe developmental disorders of the gastrointestinal epithelium were induced in EGFR-knockout mice.^{3,4} Taking into account these preclinical data, our results may not be so surprising.

In conclusion, erlotinib frequently induces gastrointestinal ulcer when patients are administered NSAIDs without antacids. Although antacids may weaken the effectiveness of erlotinib by reducing the blood concentration of erlotinib, on the basis of our experiences, patients should be given antacids to avoid gastrointestinal ulcer when erlotinib and NSAIDs are administered concomitantly.

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The Role of Surgery in the Management of Primary Thymic Mucosa-associated Lymphoid Tissue (MALT) Lymphoma

To the Editor:

We read with great interest the recent article in *Journal of Thoracic Oncology* by Shimizu et al.,¹ who proposed a diagnosis flow chart (Figure 3)

for thymic mucosa-associated lymphoid tissue (MALT) lymphoma. The diagnosis flow chart is creative and valuable and presents a clear path of identifying thymic MALT lymphoma. We extend the topic by stressing the role of surgery in the management of this rare disease.

As a malignant disease, thymic MALT lymphoma must be diagnosed finally by histologic examinations, which are known as “golden standards.” Given the extreme rarity of this disease, some typical characteristics, as described by Shimizu et al., may be important clues of thymic MALT lymphoma, but they are not yet “gold standard” in diagnosis of this disease. Thus, for exact histologic diagnosis, biopsy is necessary. But in small biopsy, such as percutaneous needle biopsy, it is sometimes difficult to differentiate thymic MALT lymphoma from thymoma because of similar histologic mixture of lymphoid cells and epithelial cells in small biopsies.² Then, surgery is usually unavoidable for enough tumor biopsy, as reported in most cases of the literature.

On the other hand, according to our experience and information from the literature, thymic MALT lymphoma seems to be a special lymphoma that develops mostly within the thymus and is often encapsulated by an intact membrane.³ Local invasion or distal metastasis is barely reported for this disease. There should be no more difficulty to perform a surgery on thymic MALT lymphomas than on common thymomas. Therefore, we suggest that when thymic MALT lymphoma is highly suspected by some typical characteristics, surgery be reasonably recommended to manage the anterior mediastinal mass. Surgery should be performed not only as an approach of obtaining enough tissues for exact histologic diagnosis but also as a

choice of effective treatment by removing the disease completely.

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In Response:

We thank Song and coworkers for their letter in response to our recent article on primary thymic mucosa-associated lymphoid tissue (MALT) lymphoma published in the *Journal of Thoracic Oncology*.¹ We recommended the diagnostic flow chart for a cystic thymic mass but did not address the role of surgery in the management of this rare disease.

Song and coworkers stressed the role of surgery in the management of thymic MALT lymphoma. They suggested that surgery should be performed not only as an approach of obtaining enough tissues for exact histologic diagnosis but also as a choice of effective treatment by removing the disease completely. We fully agree with their opinion. As has been reported in the literature, thymic MALT lymphoma is often encapsulated, and local invasion or distal metastasis has barely been reported.^{1,2} If completely resected before it spreads, excellent outcome is expected. However, if the disease is left untreated and spreads beyond encapsulation, its management can be challenging.

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The case no. 9 in our article was very educational.¹ The patient was referred to our university hospital for a giant anterior mediastinal mass (Figure 1) and multiple pulmonary nodules (Figure 2). Six years previously, however, a small anterior mediastinal cystic nodule was already pointed out at a community hospital. It was diagnosed as a thymic cyst, and she had not been medically observed since then. We performed extended total thymectomy, lymph node sampling, and partial resection of the right upper and

middle lobes through a median sternotomy. The disease was diagnosed as thymic and pulmonary MALT lymphomas with lymph node spread, and we additionally irradiated the remaining left pulmonary nodule. She is well without any signs of recurrence 2 years after surgery. It is unclear whether the pulmonary MALT lymphomas and lymph node spread were multiple primaries or metastases from the thymic mass. If they were metastases, however, the disease could have been cured with much easier and simpler inter-

vention 6 years ago; surgical resection of the small cystic nodule.

Recent advances in video-assisted thoracoscopic surgery (VATS) instruments and techniques have enabled surgeons to accomplish a variety of minimally invasive procedures to completely remove the thymus in myasthenia gravis patients or anterior mediastinal masses.³ According to our experience and the literature, local invasion is extremely rare in thymic MALT lymphoma.^{1,2} Even in our case no. 9 described above, probably a thymic MALT lymphoma in a highly advanced stage, there was no invasion to the surrounding anatomic structures. When a thymic MALT lymphoma is suspected based on our diagnostic flow chart, VATS resection will be beneficial for the patient, enabling complete removal, minimal invasion, and definitive histologic diagnosis.

We'd like to thank Song and co-workers again for allowing us the opportunity to describe the role of surgery in the management of thymic MALT lymphoma. There seems to be an increase in the number of thymic MALT lymphoma cases reported, probably due to increased awareness of this disease among physicians and pathologists. The diagnostic flow chart for a cystic thymic mass in our report¹ and the surgical management strategy for this disease in the present communications will be very helpful in clinical practice.

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FIGURE 1. Chest computed tomography revealed a giant anterior mediastinal tumor with multiple cystic lesions.

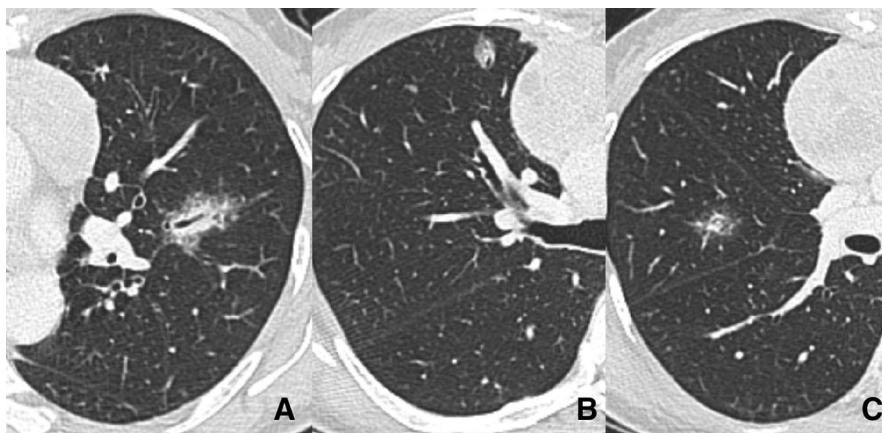


FIGURE 2. Focal subsolid nodules in the left upper lobe (A), right upper lobe (B), and middle lobe (C) on chest computed tomography.